Environ Health Perspect
DOI: 10.1289/EHP272

Supplemental Material

IL-33 Drives Augmented Responses to Ozone in Obese Mice

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Figure S3. Gating of ILC2. Lungs were disrupted, and single cell suspensions generated. Unstimulated cells were stained with CD45, Thy1.2, a linage cocktail, ST2, and CD127. In A-D are shown stains from one representative *db/db* mouse exposed to O_3. The fluorescence minus one (FMO) control stains for Lin, Thy1.2, ST2, and CD127 are also shown. For control staining, cells from three *db/db* O_3-exposed mice were combined. Total ILC2 (Figure 4A) were gated as $SSC^{Low}FSC^{Low}CD45^{+}Lin^{-}Thy1.2^{+}ST2^{+}CD127^{+}$.

Figure S4. Gating for IL-13^{+} and IL-5^{+} ILC2. Lungs were disrupted, single cell suspensions generated, and cells stimulated with PMA and ionomycin as described in Supplemental Methods. Shown is a representative stain from one *db/db* O_3-exposed mouse. Cells were stained with antibodies to CD45, Thy1.2, a linage (Lin) cocktail, IL-5 or IL-13, and ST2. IL-13^{+} and IL-5^{+} ILC2s were gated as $SSC^{Low}FSC^{Low}CD45^{+}Lin^{-}Thy1.2^{+}IL\text{-}13^{+}$ and $SSC^{Low}FSC^{Low}CD45^{+}Lin^{-}Thy1.2^{+}IL\text{-}5^{+}$ respectively. As confirmation of the cells ILC2 state, cells were also stained with ST2, shown in the upper right quadrant are those cells that are $SSC^{Low}FSC^{Low}CD45^{+}Lin^{-}Thy1.2^{+}IL\text{-}13^{+}ST2^{High}$ or $SSC^{Low}FSC^{Low}CD45^{+}Lin^{-}Thy1.2^{+}IL\text{-}5^{+}ST2^{High}$ which the majority were. The fluorescence minus one (FMO) control stains for IL-13 and IL-5 (which used the same isotype) are also shown. For control staining, from three *db/db* O_3-exposed mice were combined.

Figure S5. IL-13^{+}ST2^{+} costaining on γδ T cells. Lungs were disrupted, single cell suspensions generated, and cells stimulated with PMA and ionomycin as described in Supplemental Methods. Cells were stained with antibodies to CD45, CD3, TCRδ, IL-13, and ST2. IL-13^{+} γδ T cells (Figure 4C,E) were gated as $SSC^{low}CD45^{+}CD3^{+}TCR\delta^{+}IL\text{-}13^{+}$ and ST2^{+}γδ T cells were gated as $SSC^{low}TCR\delta^{+}ST2^{+}$ (Figure 4C,D). To determine if the IL-13^{+} γδ T cells were also positive for ST2, cells were gated as $SSC^{low}CD45^{+}CD3^{+}TCR\delta^{+}IL\text{-}13^{+}ST2^{+}$. Shown is one representative stain from a *db/db* mouse exposed to O_3. For the fluorescence minus one (FMO) control stains, cells from three *db/db* O_3-exposed mice were combined.